

Tobacco Cessation Program

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Quit to Win



Nicotine Replacement Therapy (NRT)

“The cigarette should not be construed as a product but a package. The product is nicotine. Think of a puff of smoke as the vehicle for nicotine...Think of the cigarette as the dispenser for a dose of unit of nicotine...Smoke is beyond question the most optimised vehicle of nicotine and the cigarette the most optimized dispenser of smoke.” William Dunn Jr., Phillip Morris researcher, 1972.

Does NRT increase the risk of cardiovascular disease?

NO: Although nicotine addiction resembles addiction to drugs such as heroin, cocaine and alcohol, nicotine's effects are relatively mild. While people smoke for nicotine, they die mainly from the tar and other components added to the cigarette.¹ During the ‘combustion’ of a cigarette, chemicals such as ammonia, cadmium, carbon monoxide, formaldehyde, nitrosamines and mercury are either formed or released. These substances are not only carcinogenic, but are also vasoactive (promote thrombogenesis and vasoconstriction). This results in increased risks for myocardial infarction, stroke and venous thromboembolism. Nicotine alone does stimulate the adrenergic system; however, current formulations of nicotine therapy underdoses nicotine as compared with the amount smoked by a person. Therefore, tobacco use is much more toxic than NRT.

Which form of NRT should I recommend to a patient?

Most tobacco users today have already tried some form of NRT and will have a ‘story’ of their own as to why a particular form or dose of NRT did not work. Often, the dose is appropriate, but a behavioral/social event stimulated relapse. As always, listen to the patient and identify their triggers. Address barriers to quitting and arrange behavioral support if needed. NRT comes in the following forms²:

NRT: Transdermal Patch (24h or 16h)

Side Effects: Skin irritation, insomnia

Begin with higher doses for 1.5-2 ppd then taper. Start at mid level dose for 1ppd or less use.

NRT: Nicotine polacrilex gum

Side Effects: Mouth irritation, TMJ, dyspepsia, hiccups
(2mg <25 cig/d, 4mg>25 cig/d)

NRT: Vapor Inhaler

Side Effects: Oral irritation, cough
(4mg/cartridge..6-16/day)

NRT: Nasal Spray

Side Effects: Nasal & ocular irritation, sneezing, cough
(0.5mg/spray max of 40mg)

One of the most common problems a patient describes is “the patch works, but I get this overwhelming craving when_____”. Because the patch provides nicotine at a slow and steady rate, acute situational cravings cannot be satisfied. Addition of the gum or spray is recommended. The inhaler offers variable absorption based on patient technique.

The best form of NRT will depend on patient history and level of tobacco use, but starting with the patch and offering the gum or spray for acute cravings is a good way to initiate therapy.

- 1.Nicotine Use After the Year 2000. Editorial. The Lancet, Vol 337:8751, May 1991. 1191-1192.
- 2.Treatment of Tobacco Use and Dependence, Rigotti, N. NEJM. Vol 346:7, Feb. 14, 2002. p 506-512.

Guest Editor

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Training

Mayo Clinic Nicotine Dependence Counselor Training- May 19-22 and November 3-6, 2002
800-323-2688 <http://www.mayo.edu/cme/multi.htm>



Tobacco Treatment Specialist Training University of Massachusetts Medical School June 17-22.
1-508-856-5886 or denise.jolicoeur@umassmed.edu

8th Annual Tobacco Use Prevention Institute July 7-12 Kansas City, Missouri. <http://www.tupti.org>

Tobacco Website:

The NEHC Tobacco Homepage has been revised! <http://www-nehc.med.navy.mil/hp/tobacco>